Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Final

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Owls Head Alloys, Incorporated
187 Mitch McConnel Drive
Bowling Green, Kentucky 42101

Source Name: Owls Head Alloys, Incorporated
Mailing Address: 187 Mitch McConnel Drive
Bowling Green, Kentucky 42101

Source Location: 187 Mitch McConnell Drive Bowling Green, Kentucky 42101

Permit Number: V-04-058 Revision 2

Source A. I. #: 40313

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Regional Office: Bowling Green Regional Office

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Application

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John S. Lyons, Director Division for Air Quality

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Rev	Permit type	Log or	Complete Date	Issuance	Summary of
#		Activity#		Date	Action
	Initial Issuance	APE20040002	07/09/2004	12/16/2004	
1	Major Revision	APE20050002 APE20060001	9/29/2005 07/17/06		2 Furnaces and Bale Breaker Added (minor revision combined w/major)
2	Minor Revision	APE20070001			Added Additional Equipment

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Group 1

01 (01) Oxy/Fuel Tilting Rotary Furnace

05 (05) Oxy/Fuel Tilting Rotary Furnace

10 (08) Oxy/Fuel Tilting Rotary Furnace

11 (10) Oxy/Fuel Tilting Rotary Furnace

Description:

These furnaces have a capacity of 6.0 tons per hour each (running dross as a worst case). Salt flux (NaCl and KCl) is used to remove impurities and provide a barrier to oxidation at the surface of the melted aluminum. Attached to each furnace's exhaust is a lime-injected bag filter for the removal of particulates and acid-gases, with a capture efficiency of 90% and a control efficiency of 99.5% for particulate matter. An overall control efficiency of 99.5% is estimated for the acid gas control. Under 40 CFR Part 63 Subpart RRR, these units are classified as Group 1 furnaces.

Construction commenced: October 15, 2001 (EP 01)

February 2, 2005 (EP 05) Proposed 2006/2007 (EP 10) Proposed 2006/2007 (EP 11)

APPLICABLE REGULATIONS:

40 CFR part 63, Subpart RRR-National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

401 KAR 59:010, New Process Operations

1. Operating Limitations:

Owl's Head shall comply with the following operating limitations for each furnace:

- a. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established in the performance test, plus 14° C (25° F). [40 CFR 63.1506(m)(3)]
- b. Maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level as established during the performance test. [40 CFR 63.1506(m)(4)]
- c. Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test. [40 CFR 63.1506(m)(5)]
- d. Owl's Head Alloys, Incorporated shall post and maintain easily visible labels at each furnace that identifies the applicable emission limits and means of compliance, including;
 - (i) the type of affected source or emission unit;
 - (ii) the applicable operational control standards and control methods. This includes but is not limited to the type of charge to be used for a furnace, flux, materials and addition practices, and the applicable operating parameter and requirements as incorporated in the OM&M plan.
- e. Initiate corrective action within 1 hour of a bag leak detection system alarm. [40 CFR 63.1506(m)(1)]

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SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. Complete the corrective action procedures in accordance with the OM&M plan. [40 CFR 63.1506(m)(1)
- g. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator
 - takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
- h. Install, calibrate, operate, and maintain a device to measure and record the total weight of material fed/charged to or the aluminum produced by the affected source or emission unit over the same operating cycle or time period used in the performance test or an approved alternative.
 - a) The accuracy of the weight measurement device must be ± 1 percent of the weight being measured.
 - b) The owner or operator must verify the calibration of the weight measurement device at least once every six (6) months.
- i. Pursuant to Table 2 of 40 CFR 63, Subpart RRR, all affected sources and emission units with an add-on air pollution control device shall design and install an emission capture and collection system in accordance with the Industrial Ventilation Handbook of Recommended Practice.

2. **Emission Limitations:**

Each furnace shall comply with the following emission limitations:

- a. 15 µg of D/F TEQ per Mg (2.1 x 10⁻⁴ gr of D/F TEQ per ton) of feed/charge [40 CFR 63:1505 (i)(3)].
- b. 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or 10% of the uncontrolled HCl emissions by weight [40 CFR 63:1505 (i)(4)].
- c. 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge [40 CFR 63:1505 (i)(1)].
- d. 20 % opacity of visible emissions as determined by Reference Method 9 of Appendix A to 40 CFR 60, filed be reference in 401 KAR 59:010.
- e. Hourly particulate emissions shall not exceed the following limits:
 - For process weights < 0.5 tons/hour: 2.34 lbs/hour

 - For process weight < 30 tons/hour: $E_{PM_j} = 3.59 P_j^{0.62}$ For process weights \geq 30 tons/hour: $E_{PM_j} = 17.31 P_j^{0.16}$

Where j is the unit, E'_{PM_i} is the allowable particulate emission rate for unit j (pounds/hour) and P_i is the average process weight for unit j (tons/hour).

Compliance Demonstration:

Compliance with the production-based mass emission limits described above shall be determined by comparing the allowable rate to the actual rate as calculated below:

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SECTION B - AFFECTED FACILLITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$$X = \frac{E_X}{P}$$

Where X is the production-based emission rate of each limited pollutant (pounds/ton aluminum fed, charged or produced), E_X is the actual hourly emission rate of pollutant X

as determined during a performance test (pounds/hour) and P is the actual total aluminum fed, charged or produced during the performance test (tons/hour).

ii. Compliance with the mass emission rate for particulates described above shall be determined by the following equation:

$$PE = (PW \times PEF)$$

where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton as found in the emissions inventory system.

iii. The permittee shall demonstrate compliance with the opacity limitation through monitoring and maintenance of the records as specified in points 4. Specific
 Monitoring Requirements and 5. Specific Record Keeping Requirements below.

3. <u>Testing Requirements</u>:

- a. The permittee shall perform testing on EP 01 between the end of the first year and the end of the third year of this permit. Testing on EP 05 shall be done to demonstrate compliance with 40 CFR 63, Subpart RRR within 90 days of startup. Emissions testing shall be used to determine the following parameters:
 - i. Emission factors for D/F, HCl, and PM emissions.
 - ii. Amount of lime needed to control HCl emissions.
 - iii. Max amount of chlorine flux need for the furnace.
 - iv. Fabric filter inlet temperature.
 - v. Scrap charge and constituents that will be representative of the normal process operations.
- b. The permittee shall perform emissions testing in accordance with the requirements of 40 CFR 63.1511.
- c. The permittee shall conduct each performance test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and at the highest reactive fluxing rate.
- d. All testing methods and procedures shall be approved by the Division before carrying out the tests. See Section G(a)17.

4. Specific Monitoring Requirements:

Owl's Head shall monitor the following:

- a. The monthly hours of operation and process rate for the furnace for the same operating cycle or time period used in the performance test;
- b. Annual inspection of emission capture and collection system;
- c. Once per every 8 hours inspect lime injection device to confirm settings are the same as

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

those used in the performance test and that lime is free-flowing. If a lime is not free flowing, immediate corrective action is to be taken and noted and monitoring of malfunctioning unit will increase to once every 4 hours until 72 continuous hours with no further blockages are reported.

- d. The total reactive chlorine injection flux rate, by weight, for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test;
- e. Fabric filter inlet temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period;
- f. Once per month the labels shall be inspected to confirm that labels are intact and legible.
- g. For each control system, daily visual inspections where:
 - i. If no visible emissions are observed then no further monitoring is required.
 - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.
- h. The owner or operator must verify the calibration of the weight measurement device at least once every six (6) months.
- i. Feed/charge must be measured and recorded on an emission unit-by-emission unit basis.

In accordance with 40 CFR 63.1510 (w), the permittee may submit an application to the Division for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart RRR, subject to the provisions of paragraphs 63.1510 (w)(1) through (6).

5. **Specific Recordkeeping Requirements:**

- a. The permittee is required to keep records of all monitoring required in "Specific Monitoring Requirements" above.
- b. The permittee is required to keep a current and up-to-date OM&M plan.
- c. The permitee is required to keep records of weight measures of feed/charge to each emission unit

Specific Reporting Requirements:

- a. Following an exceedence, the permitee shall submit for a period of 12 months, reports containing the monthly and 12 month rolling average HCl emissions within 30 days of the end of each calendar month.
- b. Any violations of the operating limits that were established based on the compliance test's results shall be reported to the Division's Bowling Green Regional Office as soon as possible (immediately during regular business hours, at the beginning of the following business day for violations occurring after normal business hours).
- c. The permittee shall also submit notifications pursuant to 40 CFR 63.1515 and reports pursuant to 40 CFR 63.1516.

7. Specific Control Equipment Operating Conditions:

- a. Free flowing lime must be maintained in the silo and/or feed hopper by inspection every eight (8) hours with documentation, or every four (4) hours as outlined in 4.c, above.
- b. The lime injection rate must be equal or higher than during the compliance stack test.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02 (02) Paved Haul Road

<u>Description</u>: The haul road is approximately 0.5 miles in length. Average truck weight is assumed to be 42 tons.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. **Operating Limitations:**

The permitee shall take reasonable precaution to prevent fugitive dust emissions from becoming airborne. Visible dust emissions beyond the property line are prohibited. [401 KAR 63:010]

2. <u>Emission Limitations</u>:

None

3. <u>Testing Requirements:</u>

None.

4. **Specific Monitoring Requirements:**

None.

5. **Specific Recordkeeping Requirements:**

None.

6. Specific Reporting Requirements:

None.

7. Specific Control Equipment Operating Conditions:

None.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (03) Paved Storage Area

<u>Description</u>: Owl's Head Alloys brings in aluminum scrap that is stored in both covered and uncovered storage bundles.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. **Operating Limitations:**

The permitee shall take reasonable precaution to prevent fugitive dust emissions from becoming airborne. Visible dust emissions beyond the property line are prohibited. [401 KAR 63:010]

2. <u>Emission Limitations</u>:

None

3. Testing Requirements:

None.

4. **Specific Monitoring Requirements:**

None.

5. **Specific Recordkeeping Requirements:**

None.

6. Specific Reporting Requirements:

None.

7. Specific Control Equipment Operating Conditions:

None.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE **REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Group 2

04 (04) Dross and Salt Cake Cool Down Handling/Storage

06 (06) Dross and Salt Cake Cool Down Handling/Storage

12 (09) Dross and Salt Cake Cool Down Handling/Storage

13 (09) Dross and Salt Cake Cool Down Handling/Storage

Description: The dross and salt cake byproduct is assumed to be about 10% of the charge. For interim storage (before the material is shipped to an appropriate landfill) the permitee provides an enclosed area approximately 200 square feet in size for each of the four handling and storage units. Each emission point is ducted to a corresponding baghouse and has a process rate of approximately 3,600 lbs/hr.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

401 KAR 53:010, Ambient air quality standard.

401 KAR 59:010, New process operations.

1. **Operating Limitations:**

- a. The permitee shall take reasonable precautions to prevent fugitive dust emissions from becoming airborne. Visible fugitive dust emissions beyond the property lines are prohibited [401 KAR 63:010]
- b. The permitee shall take reasonable precautions to prevent ammonia emissions from being detected beyond the property line. [401 KAR 53:010]

2. **Emission Limitations:**

Each point shall comply with the following emission limitations:

- a. 20 % opacity of visible emissions as determined by Reference Method 9 of Appendix A to 40 CFR 60, incorporated by reference in 401 KAR 59:010.
- b. Hourly particulate emissions shall not exceed the following limits:
 - For process weights < 0.5 tons/hour: 2.34 lbs/hour

 - For process weight < 30 tons/hour: $E_{PM_j}^{'} = 3.59 P_j^{0.62}$ For process weights ≥ 30 tons/hour: $E_{PM_j}^{'} = 17.31 P_j^{0.16}$

Where j is the unit, E'_{PM_i} is the allowable particulate emission rate for unit j (pounds/hour) and P_i is the average process weight for unit j (tons/hour).

Compliance Demonstration:

i. Compliance with the mass emission rate for particulates described above shall be determined by the following equation:

$$PE = (PW \times PEF)$$

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton as found in the emissions inventory system.

ii. The permittee shall demonstrate compliance with the opacity limitation through monitoring and maintenance of the records as specified in points 4. Specific Monitoring Requirements and 5. Specific Record Keeping Requirements below.

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the monthly hours of operation and monthly process rate.
- b. For each control system, daily visual inspections where:
 - i. If no visible emissions are observed then no further monitoring is required.
 - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

5. **Specific Recordkeeping Requirements:**

The permittee shall keep records of all monitoring requirements in "Specific Monitoring Requirements" above.

Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

07 (07) Outside Dross/Salt Cake Storage Bins and Loadout

Description: The outside storage bins are for dross and salt cake and are covered. The potential throughput for the storage bins is 7,200 lbs/hr. There are 7 bins with a total area of 22,172 square feet. The outside dross and salt cake bins also have loadout points for loading and unloading. This loadout is hooded and ducted to baghouse #2. The processing rate is 7,200 lbs/hr.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions. 401 KAR 59:010, New process operations.

1. **Operating Limitations:**

The permitee shall take reasonable precaution to prevent fugitive dust emissions from becoming airborne. Visible dust emissions beyond the property line are prohibited. [401 KAR 63:010]

2. Emission Limitations:

This point shall comply with the following emission limitations:

- a. 20 % opacity of visible emissions as determined by Reference Method 9 of Appendix A to 40 CFR 60, incorporated by reference in 401 KAR 59:010.
- b. Hourly particulate emissions shall not exceed the following limits:
 - For process weights < 0.5 tons/hour: 2.34 lbs/hour
 - For process weight < 30 tons/hour: $E'_{PM_j} = 3.59 P_j^{0.62}$
 - For process weights ≥ 30 tons/hour: $E_{PM_j}^{'} = 17.31 P_j^{0.16}$

Where j is the unit, E'_{PMj} is the allowable particulate emission rate for unit j (pounds/hour) and P_j is the average process weight for unit j (tons/hour).

Compliance Demonstration:

i. Compliance with the mass emission rate for particulates described above shall be determined by the following equation:

$$PE = (PW \times PEF)$$

where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton as found in the emissions inventory system.

ii. The permittee shall demonstrate compliance with the opacity limitation through monitoring and maintenance of the records as specified in points **4. Specific**

Monitoring Requirements and 5. Specific Record Keeping Requirements below.

3. <u>Testing Requirements</u>:

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the monthly hours of operation and monthly process rate.
- b. For each control system, daily visual inspections where:
 - i. If no visible emissions are observed then no further monitoring is required.
 - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

5. **Specific Recordkeeping Requirements:**

The permittee shall keep records of all monitoring requirements in "Specific Monitoring Requirements" above.

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

09 (09) Outside Scrap Processing

Description: The Outside Scrap Processing area consists of a low speed bale breaker and a low-speed pre-ripper, both of which are located under a vacuum hood that exhausts to a baghouse. The outside scrap bale breaker breaks apart the large, compacted bales of aluminum scrap brought to the facility for processing. This allows for inspection of the material for dangerous objects (such as fire extinguishers) and incompatible metals and allows the magnets to remove steel from the bundles. The process may also loosely crumple larger, unwieldy pieces of aluminum, but should not shred the material. Scrap bales are placed into the device by a loader vehicle via the in-feed hopper. The material then passes through a group of metal "fingers" at the bottom of the feed which pull the materials apart and deposit them on a conveyor. The material passes under the magnet before entering the building for processing. The processing rate is 7,200 lbs/hr. This device has minimal emissions. The 52 rpm pre-ripper which provides additional separation of materials, also has minimal emissions. This equipment is intended to improve the aluminum chemistry by allowing an air knife to remove additional non-compatible materials. The Bale Breaker and pre-ripper will be hooded with emissions passing through a baghouse.

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations

401 KAR 63:010, Fugitive emissions.

1. **Operating Limitations:**

a. The permitee shall take reasonable precaution to prevent fugitive dust emissions from becoming airborne. Visible dust emissions beyond the property line are prohibited.

[401 KAR 63:010]

b. The bale breaker and pre-ripper shall only be used to break apart bales of materials. The devices shall not be used to re-size larger, individual pieces of scrap or used as shredders. The speed of the bale breaker and the pre-ripper shall not increase above 25 rpms and 52 rpms, respectively.

Compliance Demonstration:

The permittee shall keep monthly records of all precautions taken to limit fugitives, including, but not limited to, sweeping and water sprays used to control dust. Permitee shall also keep maintenance records for the devices that indicate the speed of the devices, and verification that the speed has not exceeded the applicable operating limit.

2. <u>Emission Limitations</u>:

- a) Pursuant to 401 KAR 59:010
 - i. Section 3 (1), opacity shall not exceed 20%.
 - ii. Section 3 (2) hourly particulate emissions for each emission point shall not exceed the following limit:

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For process rates up to 1,000 lbs/hr: E = 2.34For process rates up to 60,000 lbs/hr: $E = 3.59 P^{0.62}$

For process rates in excess of 60,000 lbs/hr: $E = 17.31 P^{0.16}$

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

Compliance Demonstration:

- a) For PM emissions, compliance is assumed using the information submitted in the application.
- b) Compliance with the opacity limits shall be demonstrated through the following methods: The permittee shall perform the monitoring and recordkeeping requirements listed under **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**, below, during all periods.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted at least once per life of this permit as required by the Division.

4. **Specific Monitoring Requirements:**

- a) The permittee shall monitor the monthly hours of operation and the total monthly input of raw materials of each processes unit at each emission point.
- b) For each stack, vent or control system:
 - i. Weekly observations of visible emissions during operation of associated equipment.
 - ii. Observations of visible emissions during all periods of control equipment malfunction.
- c) If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

5. **Specific Recordkeeping Requirements:**

- a) Monthly records shall be maintained of the total input of all raw materials and hours of operation of each process unit at each emission point.
- b) For each stack, vent or control system, a log shall be kept of all emission observations. Notation in the weekly log shall be made as follows:
 - i Weekly observations of visible emissions during operation of associated equipment.
 - ii. Observations of visible emissions during all periods of control equipment malfunction.
- c) If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

6. Specific Reporting Requirements:

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division of Air Quality within 30 days of the exceedance.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. <u>Specific Control Equipment Operating Conditions</u>:

- a) The control equipment shall be operated at all times when the associated emission units are in operation.
- b) The permittee shall maintain on site a daily log of the pressure drop across the baghouse and ensure all parameters remain within the range recommended by the manufacturer and/or standard operating practices.

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SECTION C - INSIGNIFICANT ACTIVITIES

<u>Description</u> <u>Generally Applicable Regulation</u>

1. Crucible burners 401 KAR 59:010 2. Air Knife 401 KAR 63:010 Permit Number: <u>V-04-058 R2</u> Page: <u>16</u> of <u>27</u>

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the material incorporated by reference in 401 KAR 52:020 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate, HCl, and D/F emissions as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055; Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V*Permits incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Bowling Green Regional Office 1508 Western Avenue Bowling Green, KY 42104-3356 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

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SECTION G - GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12:
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u> **Emission Points 10 - 13**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points 10, 11, 12 and 13 in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test
- 6. Terms and conditions in this permit established pursuant to the construction authority of

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SECTION G - GENERAL PROVISIONS (CONTINUED)

401 KAR 51:017 or 401 KAR 51:052 shall not expire.

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) <u>Acid Rain Program Requirements</u>

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68,

Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

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SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE